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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/339,976 11/15/94 DABERKO

E3M1/1108

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EXAMINER
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ART UNIT PAPER NUMBER
5

2308

DATE MAILED:
11/08/95

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on _____ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input checked="" type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-12 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 1-12 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☒ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☒ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

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Part III DETAILED ACTION

Drawings

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Change

3. Claims are written with two claim 8s. The examiner renumbered the second instance of claim 8 to be claim 9. Further the remaining claims are therefore, all increased by one. The remaining portions of this action will refer to claims in their new numbered state.

Claim Rejections - 35 USC § 112

4. Claim 9 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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As per claim 9, the phrase "providing means" in the context of a series of steps within a method claim is confusing. It is unclear as to who or what is providing the means for identifying each index point.

Double Patenting

5. The following non-statutory double patenting rejection is based on a judicially created doctrine of public policy reflected in the statute and is intended to prevent the unjustified or improper time-wise extension of the right to exclude granted by a patent. In re Sarett, 327 F.2d 1005, 140 USPQ 474 (CCPA 1964); In re Schneller, 397 F.2d 350, 158 USPQ 210 (CCPA 1968); In re White, 405 F.2d 904, 160 USPQ 644 (CCPA 1969); In re Thorington, 418 F.2d 528, 163 USPQ 644 (CPA 1969); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); In re Ornam, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and In re Goodman, 29 USPQ 2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 C.F.R. § 1.321(b) would overcome an actual or provisional rejection on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R. § 1.78(d). This is a *provisional* obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1-2, 9, and 12 are provisionally rejected under the judicially created doctrine of double patenting as being unpatentable over claim 1, 8, 15-21 of copending application Serial No. 08/229,570.

The subject matter recited in the claims of the patent application Serial No. 08/229,570 "comprising ABCY"

(i.e., "comprising a solid state digital hand held recording device; a multifunctional switch assembly; a

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record switch assembly; a digital recording medium, a printed circuit board including a microcontroller operable to (i) receive and process signals, (ii) control, a recording means including means for (i) receiving; (ii) storing, and a sequencing playback means converting means; and then rocker switch details")

is fully disclosed in application Serial No. 08/339,976
"comprising ABCX"

(i.e., "comprising a solid state digital hand held recording device, a multifunctional switch assembly, a record switch assembly, a digital recording medium including a region of pre-recorded messages, a printed circuit board including a microcontroller operable to (i) control, (ii) store, a recording means, including means for (i) identifying a point, (ii) beginning recording at point, and a sequencing playback means converting means")

The transitional phrase "comprising" does not exclude the presence of elements other than A, B, C, Y in application (08/229,570). This phrase extends the "right to exclude" that could be granted to application (08/229,570) to disclosed combinations such as ABCXY. Further, if application (08/339,976) were allowed, the phrase comprising would extend the "right to

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exclude" of that application, from ABCX also to ABCXY. Thus, the patent protection for the device fully disclosed in application (08/229,570) would be lengthened by allowing application (08/339,976).

Furthermore, no apparent reason exists as to why the applicant was prevented from presenting the application's (08/339,976) claims for examination during the prosecution of the application (08/229,570).

7. Claims 1-13 are provisionally rejected under the judicially created doctrine of double patenting as being unpatentable over the claims of copending applications: 08/339,977 which teaches ABC and multispeed control, 08/339,139 which teaches ABC and deletion and insertion, 08/340,848 which teaches ABC and message scanning. The analysis is the same as above and will not be repeated here.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject

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matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

9. Claims 1-2 are rejected under 35 U.S.C. § 103 as being unpatentable over Barker (5,398,220).

As per claim 1, Barker teaches a device for enabling recording comprising

a solid state digital hand held recording device as a hand held dictation recording device (Fig. 1A and 1B; col. 2, lines 41-45);

a multidirectional switch as a control switch (Fig. 1C; col. 2, lines 41-45);

a printed circuit board including a microcontroller in order to control and store as a CPU (Fig. 2 and 4, items 44 and 144 respectively);

a recording means as RAM, cassette, and/or standard memory (Fig. 2, item 46 and tape; Fig. 4, item 146 and memory, col. 5, lines 22-40);

including means for (i) searching (ii) and identifying a point, (iii) and begin recording at that point as an iteratively search for a desired target point on the tape by rewinding and

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fastforwarding to find last, first, or any message including the ability to re-record or begin recording any message (col. 3, line 45-col. 4, line 30 emphasizing col 4. lines 19-30);

a sequencing playback means for playing the new message from the identified point. . .with no manual involvement of the user other than activating the multifunctional switch as an iterative search for a desired target point on the tape by rewinding and fastforwarding to find any place in memory (Fig. 1C; col. 3, line 45-col. 4, line 30 emphasizing col 4. lines 19-30);

but does not teach record switch assembly. However, Barker does teach a hand held recording device with a multidirectional switch which includes the record switch assembly in the multidirectional switch (Fig. 1C).

It would have been obvious to one of ordinary skill in the art of dictaphone design at the time of the invention to substitute the single multidirectional switch design that includes "record" as taught by Barker, with a device with one or many different switch/button arrangements for functionality because it is simply a design choice that is well known in the art.

As per claim 2, Barker teaches a multidirectional switch assembly including a single, manually operable rocker-pad as a control switch (Fig. 1C; col. 2, lines 41-45);

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used for activating playback as used for activating PLAY, REW, FF, STOP, and REC (Fig. 1C).

10. Claims 3-4, 6-8, 9-11, and 13 are rejected under 35 U.S.C. § 103 as being unpatentable over Barker (5,398,220) in view of Ball et al. (5,394,445), and Microsoft Press Computer Dictionary (Reference PTO 892).

As per claim 3, Barker does not teach the digital recording medium includes a flash memory unit whereon voice messages may be recorded. However, Ball et al. teaches recording messages on flash memory as using flash or EEPROM memory to accommodate voice, data and program storage (col. 5, lines 61-66). It would have been obvious to one of ordinary skill in the art of memory design at the time the invention was made to substitute the digital memory CMOS (Barker, col. 5, line 13) for the flash memory as taught by Ball because the substitution is an alternate memory that is versatile and portable. Further the substitution is well known in the art.

As per claims 4, 11 and 13, Barker does not specify the microcontroller including a read only memory for instructions for executing functions. However, Barker does teach a microcontroller as a hand held device containing a CPU (Fig. 2,

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items 44; Fig. 4, item 144). It would have been obvious to one of ordinary skill in the art of CPU design at the time the invention was made to specify the instruction memory of the CPU as taught by Barker as ROM because it is advantageously helpful to have the instruction set stored in a place where it cannot be changed by a instruction "accidentally" writing to memory where the critical instructions are stored. Further, the use of ROM for instruction sets is very well know in the art.

As per claim 6, Barker teaches a hand held recording device containing memory, but does not teach that memory as flash memory. Ball, however, teaches flash memory which activates a memory integrity test when initialized as a self test and initialization procedure where voice storage is processed to establish initial allocation maps of data storage (col. 6 line 55-col. 7 line 5);

but does not teach the plug in assembly for attaching flash memory to the recording device. However, it would be obvious to one of ordinary skill in the art of flash memory at the time the invention was made to add to the flash memory as taught by Ball, a plug in device such as a PCMCIA slot to that flash memory, as evidenced by Microsoft because "flash memory. . . more commonly is available as a PC Card that can be plugged into a PCMCIA slot" (Microsoft lines 10-11 under Flash Memory).

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As per claim 7, Ball et al. teaches a method of memory integrity testing comprising

testing memory segments, and marking defective memory as a self test and initialization procedure where records are deleted during initialization if checksums are found in error. data storage maps are then allocated to tell the system where storage can begin (col. 6 line 55-col. 7 line 5).

As per claim 8, the limitations are taught by Barker, Ball and Microsoft as shown in claim 6 and 7 rejections above. Further, Ball teaches activating the integrity test by manually inserting batteries into the flash memory as a self test initialized upon application of primary power (col. 6, lines 55-65).

As per claim 10, the limitations are shown in claim 1, 6, 7 and 8B, rejections above.

11. Claims 5, 9, 12 are rejected under 35 U.S.C. § 103 as being unpatentable over Barker (5,398,220) in view of Ball (5,394,445) and Plunkett, Jr. (4,468,715).

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As per claim 5, Barker teaches a method for recording a message on a hand held recording device as a hand held recording device (Fig. 1A and 1B; col. 2, lines 41-45);

but does not teach the placing of the recording device in an idle mode. However, Ball teaches a recording device which does teach and idle mode as an idle mode (Ball, col. 7 line 60). Therefore, it would have been obvious to one of ordinary skill in the art of hand held, battery operated devices at the time of the invention to add the idle mode as taught by Ball, to the hand held recording device of Barker because doing so saves power consumption by the device. An advantage well known in the art.

Barker also does not teach the specifics of the memory map used to store the inputted data. However, Plunkett teaches recording a segment by "activating a record switch, searching for the end of a last recorded message, identifying a segment of memory past. . .last message, and beginning a new recording" as the operation of the conventional dictate. . .controls. . .in the same manner as conventional dictation recording equipment (Plunkett, col. 7 lines 32-35). Moreover, Plunkett teaches the extensive use of a memory map to control the data storage in the same manner (i.e. finding the free memory wherein a new message may be stored) (Fig. 6A, and 7; col. 11, line 28-Claims of the Patent discuss memory management and the map).

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Therefore, it would have been obvious to one of ordinary skill in the art of memory management and dictaphone design to combine the memory management schemes as taught by Plunkett with the hand held recording device as taught by Barker because it very well known in the art. (i.e. this system is storing binary bits of voice speech (1s and 0s) in memory just as computers store bits of data (1s and 0s) on disk drives that also employ memory management schemes to use fragmented memory and not overwrite files.)

As per claim 9, Plunkett teaches "a method for indexing a message" as the ability to mark the recorded message to facilitate INSERT, DELETE, MOVE, and JUMP (col. 7- col. 9)

"comprising the steps of: beginning a recording by activating a record switch " as the operation of conventional dictation recording equipment (col. 7, line 32-36); and

"activating the record switch to identify an index point while recording" as recording an instruction at any point in the dictation by operating the instruction control (Fig. 3, item 41; col. 7, lines 40-44); and

"providing means for identifying each index point as a starting point of a new recording segment" as then offering the ability, at the point marked by the instruction control, to

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INSERT, DELETE, MOVE, JUMP within the recorded message (col. 7, lines 43-48).

As per claim 12, Barker and Plunkett teach the limitation as described above and Plunkett further teaches and index switching means enabling the user to rapidly recall indexed messages as the operation of fast forward control and fast rewind control (Fig. 3, items 42 and 43; col. 7, lines 37-39).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shirai (4,687,200) teaches multidirectional switching.

Beranger et al. (5,442,641) teaches self testing memories for defects as well as used portions. These memories include Flash Memory (col. 10, lines 45-50)

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Grover whose telephone number is (703) 305-3863.



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SUPERVISORY PATENT EXAMINER
ART UNIT 2308



John Michael Grover
Assistant Patent Examiner
November 2, 1995